AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

- 1. (Currently Amended) A scale for technical devices which are used for high-resolution or ultrahigh-resolution imaging of structures, the scale comprising:
- a plurality of one of crystalline and amorphous first material layers having a first thickness; and
- a plurality of one of crystalline and amorphous second material layers, the first material layers being different from the second material layers so that the second material layers are readily distinguishable from the first material layers when imaged using one of high-resolution and ultrahigh-resolution imaging methods, the second material layers having a second thickness and the first material layers alternating with the second material layers,

at least one of the first and second material layers having a thickness of less than twenty-five nanometers,

wherein the first and second material layers are deposited by a material deposition method in a deposition direction.

- 2. (Previously Presented) The scale as recited in claim 1 wherein the first material layers have a different strain than the second material layers.
- 3. (Previously Presented) The scale as recited in claim 1 wherein both the first and second material layers have a thickness of fewer than ten nanometers.
- 4. (Previously Presented) The scale as recited in claim 1 wherein the first and second materials layers have different band gaps.
- 5. (Previously Presented) The scale as recited in claim 1 further comprising a plurality of third material layers having a third thickness different from the second thickness and a plurality of fourth material layers having the same thickness as the first thickness, the third material layers alternating with the fourth material layers.
- 6. (Previously Presented) A scale for technical devices which are used for high-resolution or ultrahigh-resolution imaging of structures, the scale comprising:
- a plurality of one of crystalline and amorphous first material layers having a first thickness; and
- a plurality of one of crystalline and amorphous second material layers which are distinguishable from the first material layers when imaged using one of high-resolution and ultrahigh-resolution imaging methods, the second material layers having a second thickness

and the first material layers alternating with the second material layers, both of the first and second material layers having a thickness of less than ten nanometers,

wherein the first material layers have a different strain than the second material layers, and the first and second materials layers have different band gaps.

- 7. (Previously Presented) The scale as recited in claim 6 further comprising a plurality of third material layers having a third thickness different from the second thickness and a plurality of fourth material layers having the same thickness as the first thickness, the third material layers alternating with the fourth material layers.
- 8. (Previously Presented) A scale for technical devices which are used for high-resolution or ultrahigh-resolution imaging of structures, the scale comprising:
 - a plurality of crystalline first material layers having a first thickness; and
- a plurality of amorphous second material layers which are distinguishable from the first material layers when imaged using one of high-resolution and ultrahigh-resolution imaging methods, the second material layers having a second thickness and the first material layers alternating with the second material layers,

at least one of the first and second material layers having a thickness of less than twenty-five nanometers,

wherein the first material layers have a different composition than the second material layers.

- 9. (Previously Presented) The scale as recited in claim 8 wherein both the first and second material layers have a thickness of fewer than ten nanometers.
- 10. (Previously Presented) The scale as recited in claim 8 wherein the first and second materials layers have different band gaps.
- 11. (Previously Presented) The scale as recited in claim 8 further comprising a plurality of third material layers having a third thickness different from the second thickness and a plurality of fourth material layers having the same thickness as the first thickness, the third material layers alternating with the fourth material layers.
- 12. (New) A scale for technical devices which are used for high-resolution or ultrahigh-resolution imaging of structures, the scale comprising:
- a plurality of one of crystalline and amorphous first material layers having a first thickness; and
- a plurality of one of crystalline and amorphous second material layers, wherein if the first material layers are crystalline then the second material layers are amorphous, and if the

first material layers are amorphous then the second material layers are crystalline, the second material layers being readily distinguishable from the first material layers when imaged using one of high-resolution and ultrahigh-resolution imaging methods, the second material layers having a second thickness and the first material layers alternating with the second material layers,

at least one of the first and second material layers having a thickness of less than twenty-five nanometers.